

Remarks

Double Patenting

A Terminal Disclaimer accompanies this Response to overcome the double patenting rejection.

Rejections Under Section 103 -- Chun Is Not Prior Art

Claims 23 and 24 were rejected under Section 103 as being obvious over Chun 5856212 (Claim 23) or Chun in view of McShane 5157480 (Claim 24). The earliest possible effective filing date of Chun is January 4, 1995.

The Rule 131 Declaration of inventor Jerry Brooks and the attached documents show that the claimed subject matter was conceived before January 4, 1995 and a constructive reduction to practice was pursued thereafter with reasonable diligence. Chun, therefore, should be withdrawn as a prior art reference.

1. Constructive Reduction to Practice.

The invention was documented in an Invention Disclosure document assigned no. 94-0256 received on September 1, 1994, as noted on page 1 of the Invention Disclosure attached as Exhibit A to Mr. Brook's Declaration. The Invention Disclosure was assigned to outside patent counsel Steve Ormiston on February 3, 1995 to prepare the patent application. A copy of the Micron Patent Checklist documenting the assignment of the case to Mr. Ormiston is attached to Mr. Brook's Declaration as Exhibit B. Mr. Ormiston sent Mr. King and I a first draft of the patent application for review on April 17, 1995 and a revised/final draft for review on May 2, 1995. The finalized application was sent to Micron legal along with the Declaration on May 3, 1995. The Declaration was signed and returned to Mr. Ormiston and the application filed on May 8, 1995. A copy of the transmittals documenting Mr. Ormiston sending us the first and revised draft patent applications and the final application and Declaration are attached to this Declaration as Exhibits C, D and E.

The critical period for diligence begins just prior to January 4, 1995 and continues until the May 8, 1995 filing date of the grandparent to this application. Reasonable diligence is established if the attorney worked reasonably hard on the application during this period. MPEP 2138.06. During this period, the outside attorney working on the patent application received the case assignment from Micron, prepared

a draft patent application for inventor review, received comments from the inventor, prepared the revised/final draft patent application and the Declaration (and sent them to Micron for signature and received them back from Micron with signatures), and filed the patent application.

Preparing and filing the patent application within this four month period is reasonable *a priori*. This is particularly so for this application, which was handled by a small firm in Boise that was at the time preparing and prosecuting many patent applications on behalf of Micron, a large corporate client who was itself managing the preparation and prosecution of hundreds of patent applications.

2. *Mapping The Claims To The Invention Disclosure.*

Claim 23 recites a semiconductor chip having a first surface and a second surface intersecting the first surface; conductive leads electrically connected to and extending along the first surface of the chip at least to the intersection of the first and second surfaces; a continuous body of encapsulating material substantially encapsulating the chip and the conductive leads; and solder balls each having a first portion disposed in the encapsulating material and contacting a conductive lead and a second portion protruding from the encapsulating material.

Claim 24 recites a semiconductor chip having a first surface and a second surface intersecting the first surface and bond pads aligned along the first surface of the chip; conductive leads electrically connected to the bond pads and each lead extending along the first surface of the chip at least to the intersection of the first and second surfaces; a continuous body of encapsulating material substantially encapsulating the chip and the conductive leads; and solder balls each having a first portion disposed in the encapsulating material and contacting a conductive lead and a second portion protruding from the encapsulating material.

Each of the elements of Claims 23 and 24 may be seen, for example, in Figs. 2 and 3 of the Invention Disclosure.

The claims are felt to be in condition for allowance.

The foregoing is believed to be a complete response to the outstanding office action.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'S. Ormiston', is written over a horizontal line.

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